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10/817,662

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James R. Ober

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DANN, DORFMAN, HERRELL & SKILLMAN
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EXAMINER

AMIRI, NAHID

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/817,662

Applicant(s)

OBER, JAMES R.

Examiner

Nahid Amiri

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 15-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 26-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

In view of Applicant's Amendment received 30 August 2007, amendments to the claims have been entered. Claims 15-25 are withdrawn. Claims 1-29 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 and 26-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 3, applicant should defines "solid" and claim 26, line 16, should defines "rigid" because, it is unclear what constitute "solid" and "rigid" which prevent the expansion and contraction of the device while the outer sleeve is hollow and has slits (52) on its connector (54).

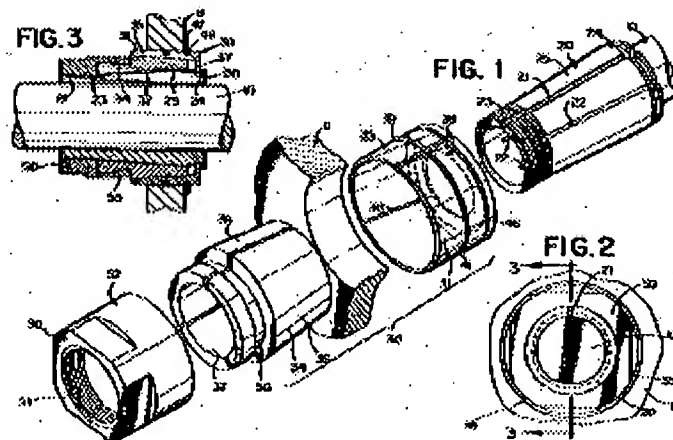
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,600,334 Soussloff.

With respect to claim 1, Soussloff discloses a mounting device (**Fig. 9**) for anchoring a machine element (**8**) on the cylindrical shaft (**10**), including an outer sleeve (**34**) having an internal bore having a tapered portion and a frustoconical external surface, wherein the outer sleeve is substantially solid, inner sleeve (**120**) including an internal bore a threaded portion; an external tapered portion configured to cooperate with the tapered portion of the outer sleeve (**34**); an axially elongated slot extending along the inner sleeve (**120**) to allow expansion and contraction of the inner sleeve (**34**), a locking ring (**50**) threadedly engaging the threaded portion (**T**) of the inner sleeve (**120**). Soussloff does not disclose that the outer sleeve prevents expansion or contraction when the device is tightened or loosened. It would have been obvious to one of ordinary skill in the art at the time of invention was made to eliminate undesirable feature such as slits of the outer sleeve (**34**) of Soussloff to prevent the expansion or contraction, since it has been held that omission of an element and its function in combination where the remaining elements perform the same function as before involves only routine skill in the art. *In re Karlson*, 136, USPQ 184.



With respect to claim 2, Soussloff discloses (**Fig. 9**) when turning the locking ring (**50**) a second direction opposite the first direction operates to displace the inner sleeve (**34**) in a second direction relative to the outer sleeve (**120**) so that the external tapered portion of the inner sleeve

(120) rides down the internal tapered portion of the outer sleeve (34) allowing the internal bore of the inner sleeve (34) to expand, thereby loosening the device.

With respect to claims 3, 14 and 29, Soussloff discloses the claimed invention except at least one of the inner sleeve and the outer sleeve is formed of plastic, the engagement surface is formed of a plastic material. Plastic and its properties are well-known per se. It would have been obvious to one of ordinary skill in the art at the time of invention was made to form the inner and outer sleeves from plastic for such reasons as to provide a rust proof material which protect the mounting device from rust and corrosion due to a moisture.

With respect to claims 4 and 5, Soussloff discloses the claimed invention except for the frustoconical engagement surface of the outer sleeve is formed of a plastic having a coefficient of friction of at least 1.0 and less than 1.0. In view of the fact that the two ranges together encompass the entire range of possibilities, it is inherent that Geib meets the limitation of one of these claims. Nevertheless, it would have been an obvious matter of engineering design choice to form the frustoconical engagement surface of the outer sleeve from plastic with any desired coefficient of friction (i.e., at least 1.0 or less than 1.0) so as to achieve the desired degree of frictional locking.

With respect to claim 6, Soussloff discloses (Fig. 9) the inner sleeve (34) having a plurality of axial slots (154) extending through the inner sleeve (34) along the tapered portion.

With respect to claim 7, Soussloff discloses (Fig. 7) that the forward end of the outer sleeve (34) having a reduced diameter opening having a diameter that is smaller than the outer diameter of the forward end of the inner sleeve (120).

With respect to claim 8, Soussloff discloses a mounting device (Fig. 9) having a connector (C) connecting the outer sleeve (34) and the locking ring (50) to impede relative axial displacement between the outer sleeve (34) and the locking ring (50) while allowing relative circumferential displacement between the locking ring (50) and the outer sleeve (34).

With respect to claims 9 and 10, Soussloff discloses a mounting device (Fig. 9) including an outer sleeve (34) having a generally frustoconical external engagement surface and internal bore having a diameter; a radially deformable inner sleeve (120) having an internal bore and

configured to cooperate with the bore of the outer sleeve (34); one of the outer sleeve (34) and inner sleeve (120) having a threaded portion (T), the other of the outer sleeve (34) and inner sleeve (120) having a first connector (C); a locking ring (50) having a threaded portion configured to threadably engage the threaded portion (T) of the inner sleeve (34), and a second connector (C') configured to cooperate with the first connector (C) to connect the locking ring (50) with outer sleeve (34), and wherein the outer sleeve walls are substantially solid along the length of the engagement surface. Soussloff does not disclose that the outer sleeve configured to impede expansion of the engagement surface when the device is tightened by turning the locking ring in a first direction. It would have been obvious to one of ordinary skill in the art at the time of invention was made to eliminate undesirable feature such as slits of the outer sleeve (34) of Soussloff to prevent the expansion, since it has been held that omission of an element and its function in combination where the remaining elements perform the same function as before involves only routine skill in the art. *In re Karlson*, 136, USPQ 184.

With respect to claims 11-13, 27 and 28, Soussloff discloses (Fig. 7) that the outer sleeve bore having a portion having walls tapered and the external surface of the inner sleeve (120) including a tapered portion configured to cooperate with the tapered bore of the outer sleeve (120), wherein the engagement surface of the outer sleeve (34) is substantially rigid, and wherein the inner sleeve (120) having an axial slot (121).

With respect to claim 26, Soussloff discloses a mounting device (Fig. 7) including an internal bore onto a shaft (10) comprising an outer sleeve (34) having an outer diameter greater than the internal bore of the element, and an internal bore having a tapered surface; a radially deformable inner sleeve (120) comprising an internal bore and configured to cooperate with the bore of the outer sleeve (34) to affect contraction of the inner sleeve bore; the outer sleeve (34) and inner sleeve (120) having a threaded portion, the outer sleeve (34), the outer sleeve (34) and inner sleeve having a first connector (C); a locking ring (50) having a threaded portion configured to threadably engage the threaded portion of outer sleeve (34), a second connector (C') configured to cooperate with the first connector (C) to connect the locking ring (50) with outer sleeve (34). Soussloff does not disclose that the wherein the outer sleeve is substantially rigid. Soussloff does not disclose that the outer sleeve configured to impede expansion of the

engagement surface when the device is tightened by turning the locking ring in a first direction. It would have been obvious to one of ordinary skill in the art at the time of invention was made to eliminate undesirable feature such as slits of the outer sleeve (34) of Soussloff to prevent the expansion, since it has been held that omission of an element and its function in combination where the remaining elements perform the same function as before involves only routine skill in the art. *In re Karlson*, 136, USPQ 184.

Response to Arguments

Applicant's arguments with respect to claims 1-14 and 26-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nahid Amiri
Examiner
Art Unit 3679
December 19, 2007



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